

## Q Model AuCS<sup>®</sup> A Accessory (Automatic Cleaning System)

### Installation Use and Care Manual

This Manual Covers Installation, Use and Care Information for the AuCS<sup>®</sup> A Accessory.

We reserve the right to make product improvements at any time.  
Specifications and design are subject to change without notice.

## Safety Notices

When installing or using the AuCS<sup>®</sup>A accessory, be sure to pay close attention to the safety notices in this manual. Disregarding the notices may lead to serious injury and/or damage to the ice machine or AuCS<sup>®</sup> accessory.

Throughout this manual, you will see the following types of safety notices:



### **WARNING**

Text in a Warning box alerts you to a potential personal injury situation. Be sure to read the Warning statement, and then proceed carefully.



### **CAUTION**

Text in a Caution box alerts you to a situation in which you could damage the ice machine or AuCS<sup>®</sup> accessory. Be sure to read the Caution statement, and then proceed carefully.



### **CAUTION**

Use only Manitowoc approved Ice Machine Cleaner (part number 94-0546-3) and Sanitizer (part number 94-0565-3) with the AuCS<sup>®</sup> accessory.

Read and understand all information printed on the bottles before use.

## Procedural Notices

When installing or using the Model AuCS<sup>®</sup>A accessory, be sure to read the procedural notices in this manual. These notices supply helpful and important information.

Throughout this manual, you will see the following types of procedural notices:

### **Important**

Important boxes serve two functions:

They call the operator's attention to important information.

They also provide the service technician with information that may help in performing a procedure more efficiently. Disregarding this information may slow down the work.

**NOTE:** Text set off as a Note provides you with simple, but useful, extra information.

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## Section 1 General Information

### Freight Damage and Claims Procedures

#### 1. Shortages

Check the number of cartons delivered against the quantity shown on your receipt. If the quantities do not match, have the driver note the shortage and file your claim with the freight company.

#### 2. No-Fault Claim Procedure

Manitowoc assumes responsibility for all freight damage claims involving participating carriers, with the following exceptions:

- When the trucking company loses the equipment.
- When fire destroys the equipment en route.
- When a traffic accident damages the shipment en route.

#### 3. Visible Damage

- If a carton appears damaged in any way, open the carton and inspect the contents in the presence of the driver. Note the nature and extent of the damage on the freight bill.
- Notify your local Manitowoc distributor to inspect the merchandise within 15 days of delivery. Do not attempt to repair the damage.

#### 4. Concealed Damage

- If damage is noticed at the time of installation, notify the distributor immediately and ask for an inspection.
- Do not destroy packing materials until the inspection is completed.

These conditions must be met before your claim can be processed by the distributor.

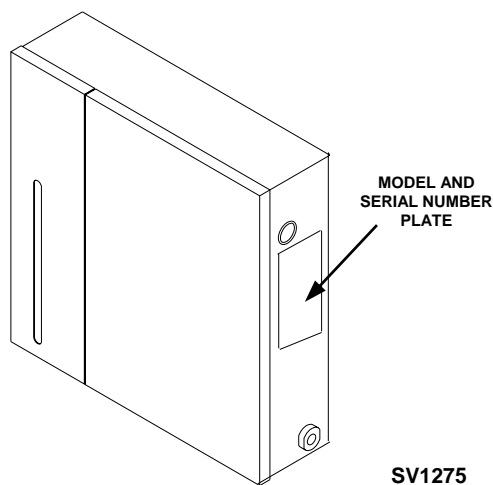
#### 5. Claims

Manitowoc Ice, Inc. and your local distributor will arrange to repair or replace the equipment.

### Model/Serial Number Location

Record the model and serial number of the AuCS® A accessory in the space provided below. These numbers are required when requesting information from your local Manitowoc distributor, service representative, or Manitowoc Ice, Inc.

The model and serial number are listed on the OWNER WARRANTY REGISTRATION CARD. They are also listed on the MODEL/SERIAL NUMBER DECAL affixed to the side of the AuCS® A accessory.



### Model/Serial Number Location

|               | Ice Machine                         | Bin/Dispenser     |
|---------------|-------------------------------------|-------------------|
| Model Number  |                                     |                   |
| Serial Number |                                     |                   |
|               | Remote Condenser or Condensing Unit | AuCS® A Accessory |
| Model Number  |                                     |                   |
| Serial Number |                                     |                   |

## Owner Warranty Registration Card

### GENERAL

The packet containing this manual also includes warranty information. Warranty coverage begins the day your new AuCS® A accessory is installed.

#### Important

Complete and mail the OWNER WARRANTY REGISTRATION CARD as soon as possible to validate the installation date.

If you do not return your OWNER WARRANTY REGISTRATION CARD, Manitowoc will use the date of sale to the Manitowoc distributor as the first day of warranty coverage for your new AuCS® A accessory.

## Warranty Coverage

### GENERAL

The following Warranty outline is provided for your convenience.

Contact your local Manitowoc representative or Manitowoc Ice, Inc. if you need further warranty information.

### PARTS

Manitowoc warrants the AuCS® A accessory against defects in materials and workmanship, under normal use and service for three (3) years from the date of original installation.

### LABOR

Labor required to repair or replace defective components is covered for three (3) years from the date of original installation.

### EXCLUSIONS

The following items are not included in the ice machine's warranty coverage:

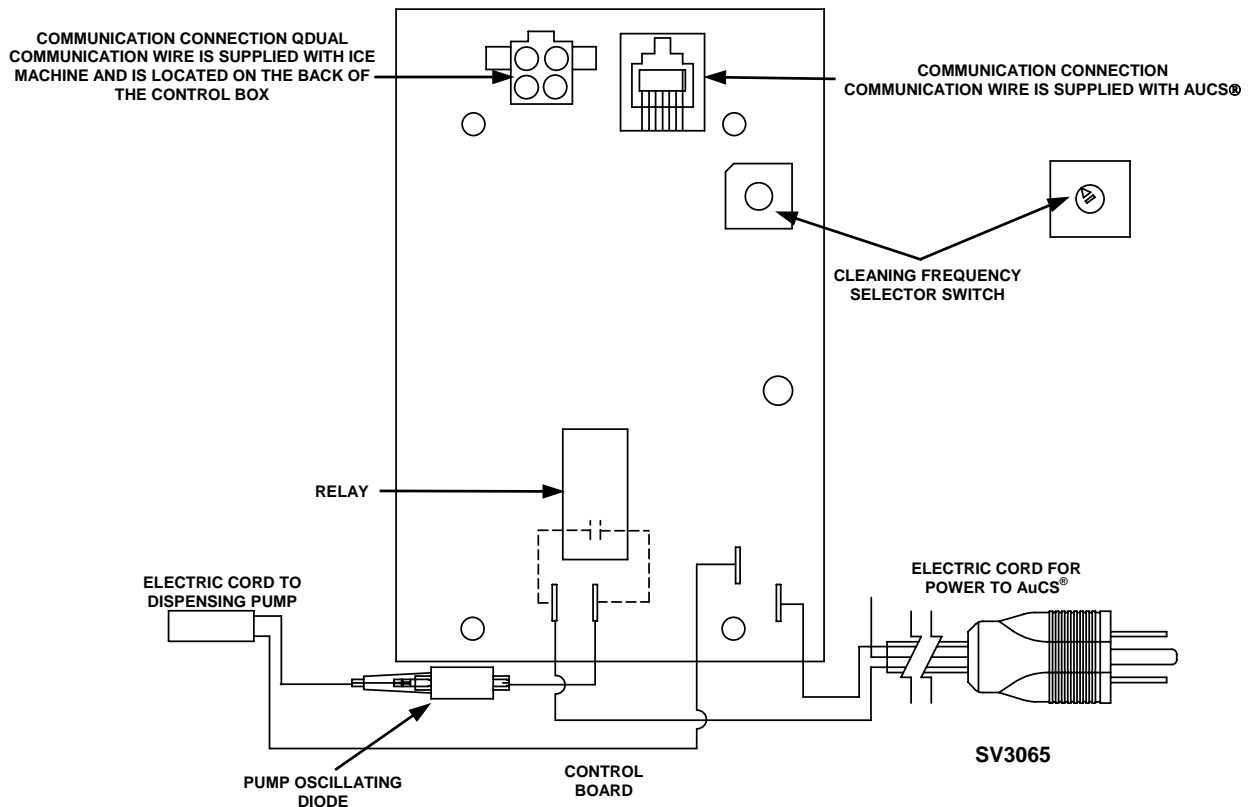
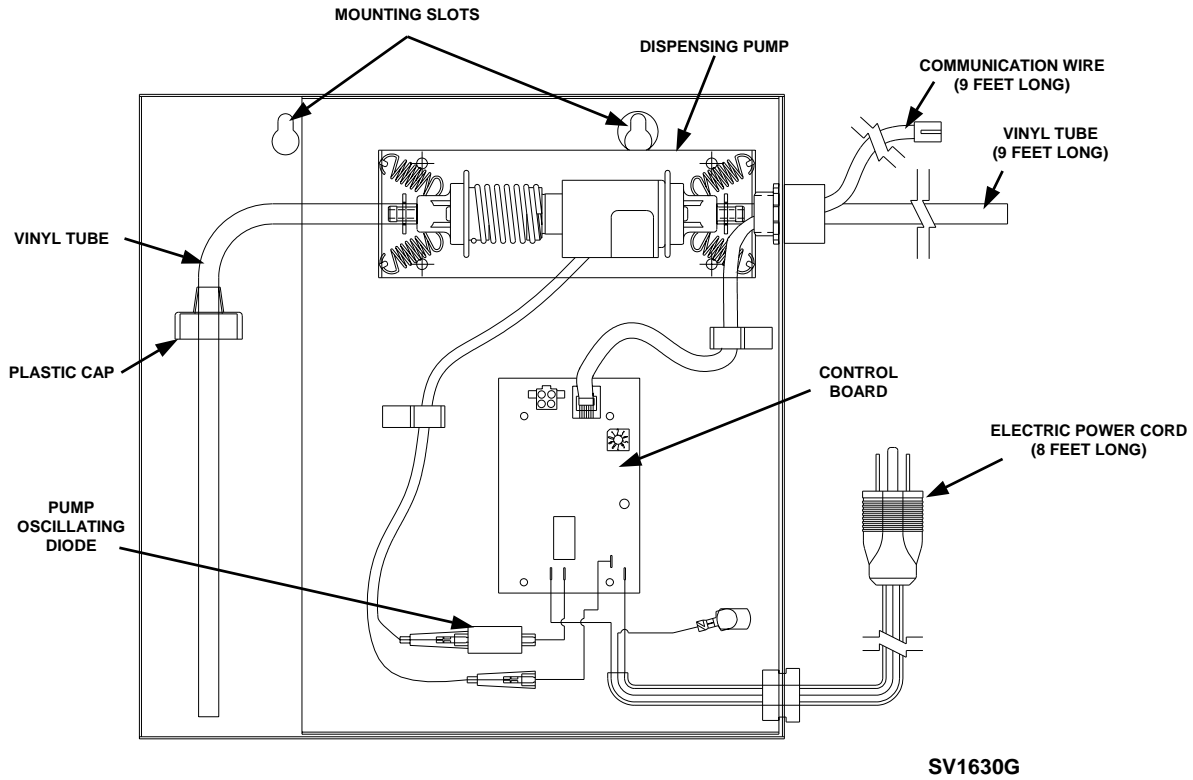
1. Normal maintenance, adjustments and cleaning as outlined in this manual.
2. Repairs due to unauthorized modifications to the ice machine or the AuCS® A accessory, or the use of non-standard parts without prior written approval from Manitowoc Ice, Inc.
3. Damage caused by improper installation of the ice machine, AuCS® A accessory, electrical supply, water supply or drainage, or damage caused by floods, storms, or other acts of God.
4. Premium labor rates due to holidays, overtime, etc.; travel time; flat rate service call charges; mileage and miscellaneous tools and material charges not listed on the payment schedule. Additional labor charges resulting from the inaccessibility of the ice machine and AuCS® A accessory are also excluded.
5. Parts or assemblies subjected to misuse, abuse, neglect or accidents.
6. Damage or problems caused by installation, cleaning and/or maintenance procedures inconsistent with the technical instructions provided in this manual.

### AUTHORIZED WARRANTY SERVICE

To comply with the provisions of the warranty, a refrigeration service company, qualified and authorized by a Manitowoc distributor, or a Contracted Service Representative must perform the warranty repair.

NOTE: If the dealer the ice machine and AuCS® A accessory were purchased from is not authorized to perform warranty service, contact the Manitowoc distributor or Manitowoc Ice, Inc. for the name of the nearest authorized service representative.

## Component Location and Identification



## Compatible Ice Machine Models

The AuCS®A accessory can be used on all Manitowoc ice machines capable of accepting the AuCS accessory.

Q Model Undercounter (Q130, Q210, Q270) QM model (QM20, QM30, QM45) and Flake Ice Machines (QF800, QC700, QF400) are not AuCS compatible.

Listed models are compatible with the AuCS®A accessory

| <b>Q MODELS</b><br>Air, Water or Remote Condenser | <b>J MODELS</b><br>Air, Water or Remote Condenser | <b>B MODELS</b><br>Air, Water or Remote Condenser |
|---|---|---|
|   |   | B150  |
| Q200  | J200  | B200  |
|   | J250  | B250  |
| Q280  |   |   |
| Q320  | J320  | B320  |
| Q370  |   |   |
| Q420  | J420  | B420  |
| Q450  | J450  | B450  |
| Q600  | J600  | B600  |
| Q800  | J800  | B800  |
| Q1000   | J1000   | B1000   |
| Q1300   | J1300   | B1300   |
| Q1600   |   |   |
| Q1800   | J1800   | B1800   |
| <b>QUIETQUBE® MODELS</b>                          |   |   |
| Q600C   |   |   |
| Q800C   |   |   |
| Q1000C  |   |   |
| Q1400C  |   |   |
| QDUALC  |   |   |
| <b>ICE BEVERAGE MODELS</b>                        |   |   |
| IB600C  |   |   |
| IB800C  |   |   |
| IB1000C   |   |   |
| SU1000C (SerVend UC300 Dispenser)                 |   |   |



## Section 2 Installation Instructions

### General

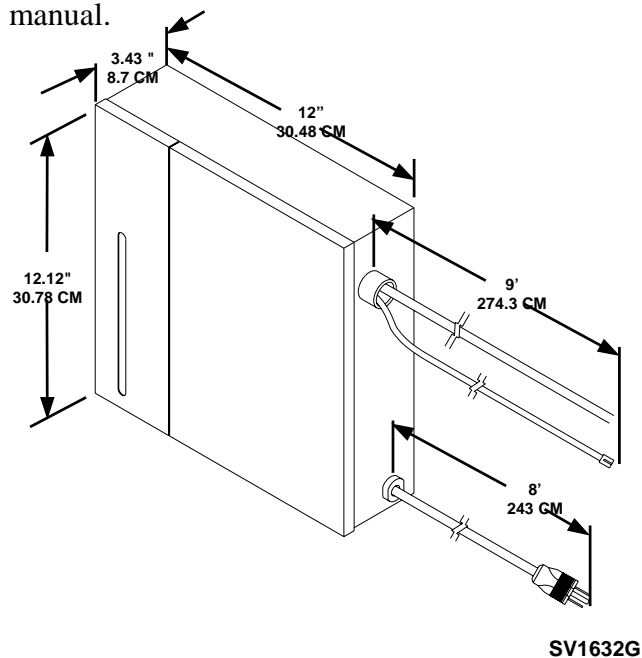
These instructions are provided to assist the qualified installer. Check your local yellow pages for the name of the nearest Manitowoc Ice Machine Distributor or call Manitowoc Ice, Inc. for information regarding installation and start-up services.



#### WARNING

Improper installation will affect dispensing rate. Install only within the parameters outlined in this installation manual.

Please contact your local Manitowoc Distributor or call Manitowoc Ice, Inc. for assistance if you encounter a problem that is not covered by this manual.



**Dimensions**

### Electrical Service



#### WARNING

All wiring must conform to local, state, and national codes.

| Voltage/Cycle/Phase | Running Amps | N.E.M.A Electrical Plug Configuration |
|---------------------|--------------|---------------------------------------|
| 115/60/1            | .3           | 5-15P                                 |
| 220/240/50/1        | .1           | No plug attached                      |

### 115 VOLT WIRING

The 115/60/1 AuCS<sup>®</sup> has an eight (8) foot cord which must be plugged into a 15 amp electrical outlet.



#### CAUTION

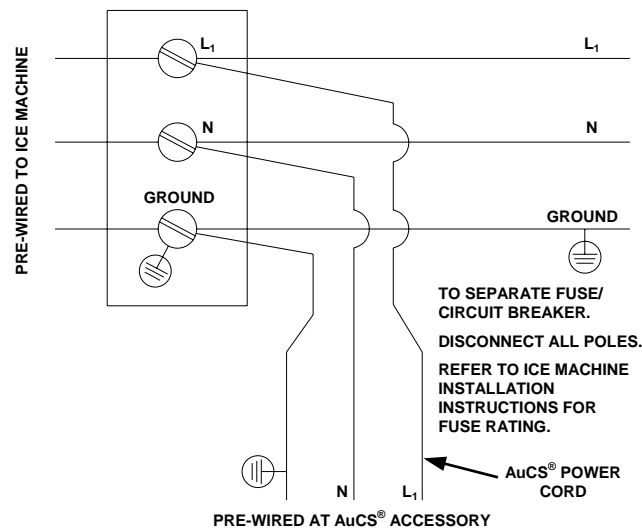
Never use an extension cord. If an outlet is not in reach of the AuCS<sup>®</sup> power cord, have an outlet installed.

### 220/240 VOLT WIRING

The 220/240/50/1 AuCS<sup>®</sup> can be wired to:

- The terminal block located in the ice machine.
- With a separate plug.
- To a separate disconnect.

TERMINAL BLOCK LOCATED  
IN ICE MACHINE



PRE-WIRED AT AuCS<sup>®</sup> ACCESSORY

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### 220/240/50/1 Wiring

## Location/Mounting

### CAUTION

Do not install in an area where the air temperature falls below 35°F or exceeds 110°F.

The AuCS® A must be protected if it will be subjected to temperatures below freezing. Refer to “Removal From Service/Winterization.”

### HEIGHT REQUIREMENT

(Refer to drawing on page 2-3.) Either the base or the top of the AuCS® A must be within 2” of the base of the ice machine. Do not mount the AuCS® A too high or too low.

### CAUTION

The cleaner or sanitizer may siphon (or dispense improperly) into the ice machine water trough if the AuCS® A is mounted too high or too low.

### DISTANCE REQUIREMENT

(Refer to drawing on page 2-3.) The AuCS® A must be mounted within 9 feet of the ice machine to accommodate the low voltage communication wire and tubing. The tubing may be shortened to accommodate a run of less than 9 feet.

### CAUTION

Do not extend the length of the 9-foot low voltage modular communication wire or tubing. The correct amount of solution will not dispense.

### FASTENING TO BIN OR DISPENSER

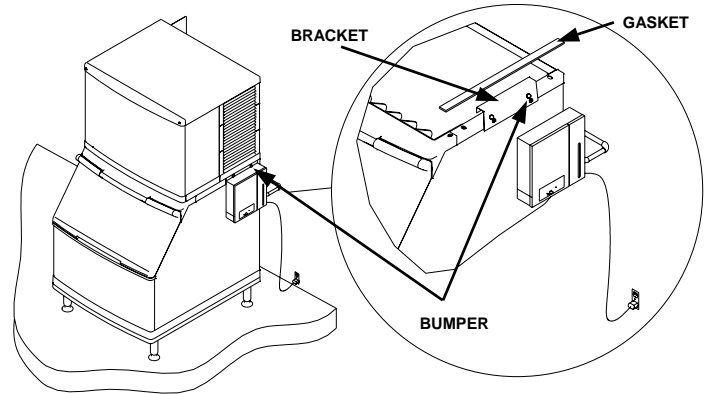
### CAUTION

The AuCS® A accessory may be mounted to the bin or dispenser only when permitted by local electrical codes.

NOTE: The ice machine’s serviceability may be reduced when the AuCS® A is mounted to the bin or dispenser. Wall mounting is recommended.

1. Set the mounting bracket (part F, page 2-4) over the bin top rail at desired location (refer to figure).
2. Remove the backing from the foam adhesive tape (part E, page 2-4). Apply tape to mounting bracket, and along the entire bin rail.

3. Align the AuCS® A key slots with the mounting bracket tabs. Verify the tabs are at the top of the key slots and that the AuCS® A is level.
4. Remove the backing from the adhesive bumpers (part D, page 2-4.) Attach bumpers to the mounting bracket directly above the AuCS® A control box. This eliminates upward movement and stops the tabs from disengaging the key slots.

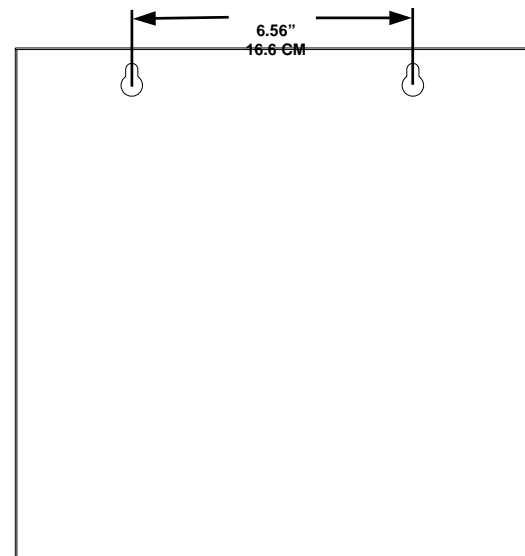


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### Mounting to Ice Machine

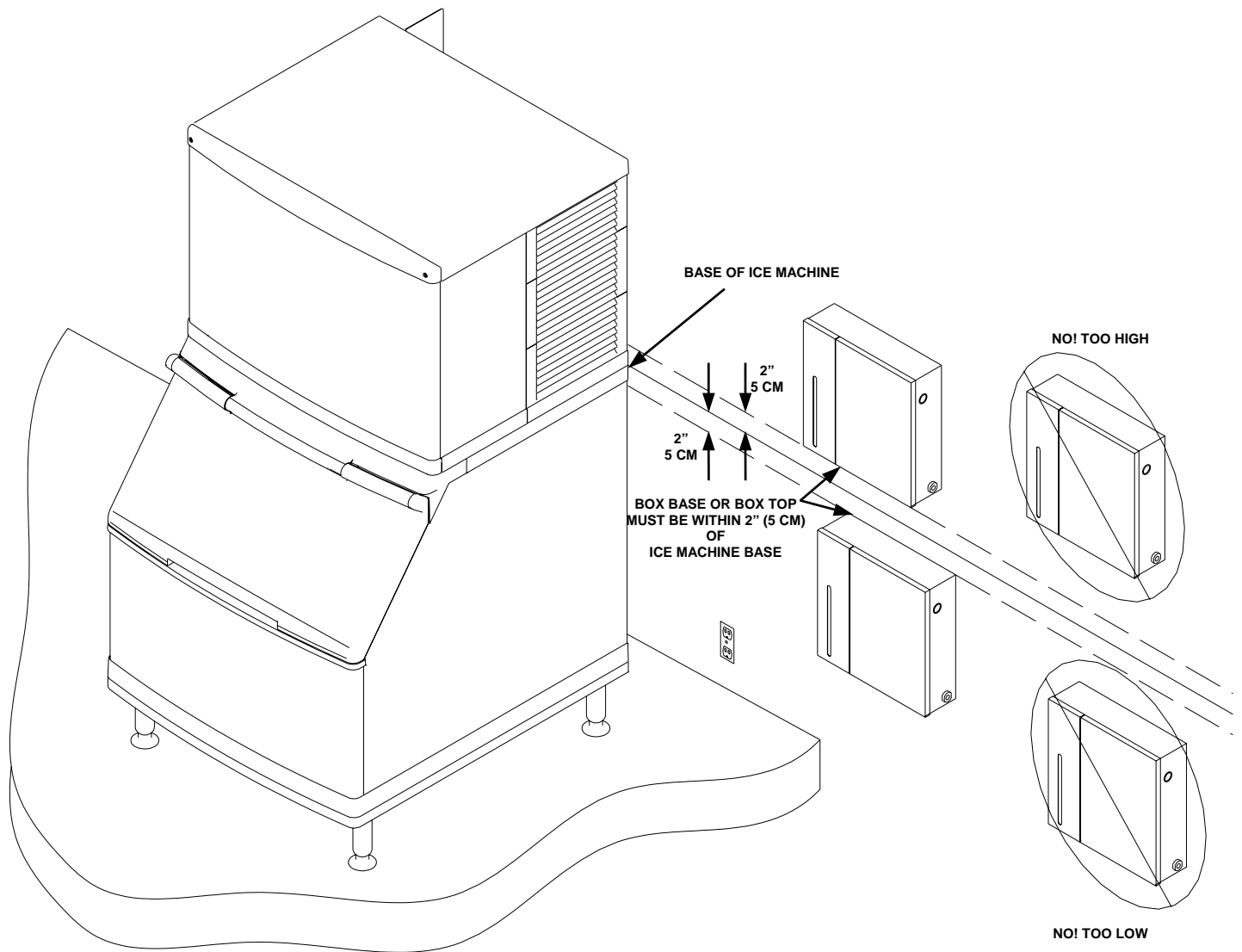
### FASTENING TO WALL

The AuCS® A is mounted to the wall using the two key slots in the back wall of the accessory. Screw fasteners (not supplied) must hold the entire weight of the AuCS® A accessory (approximately 10 lb.).



### Key Slot Dimensions

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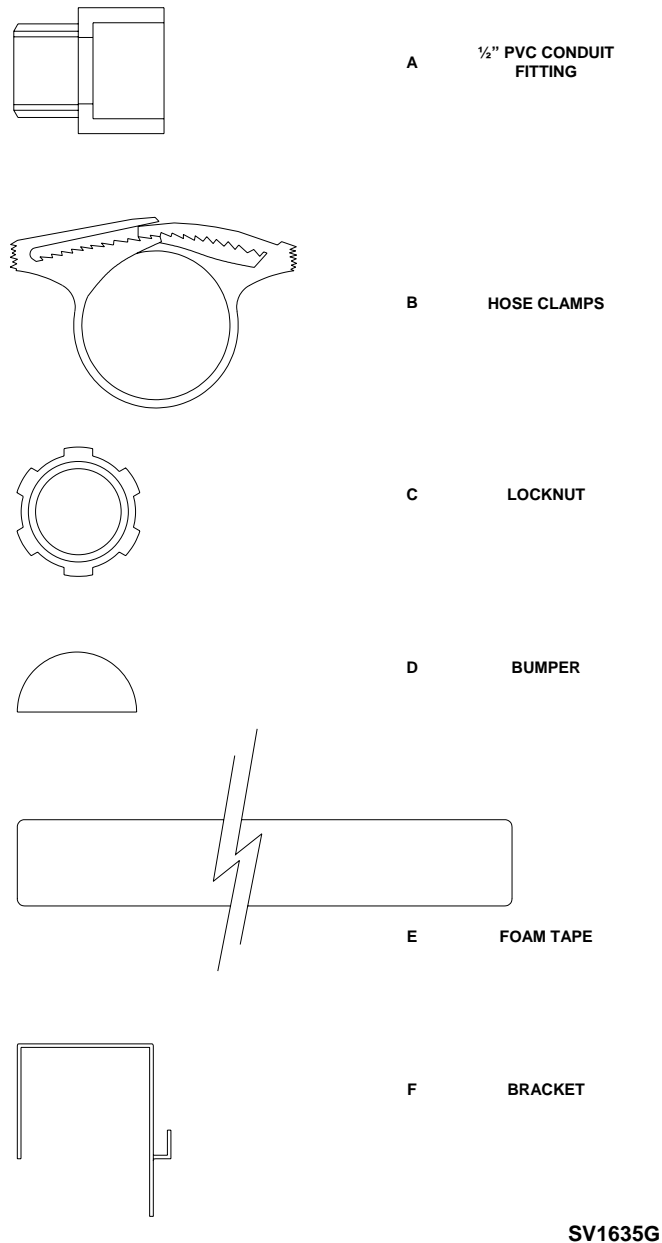
NOTE: BOX MUST ALSO MOUNT WITHIN REACH OF 9' TUBING AND LOW VOLTAGE COMMUNICATION WIRE.

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## Height and Distance Requirements

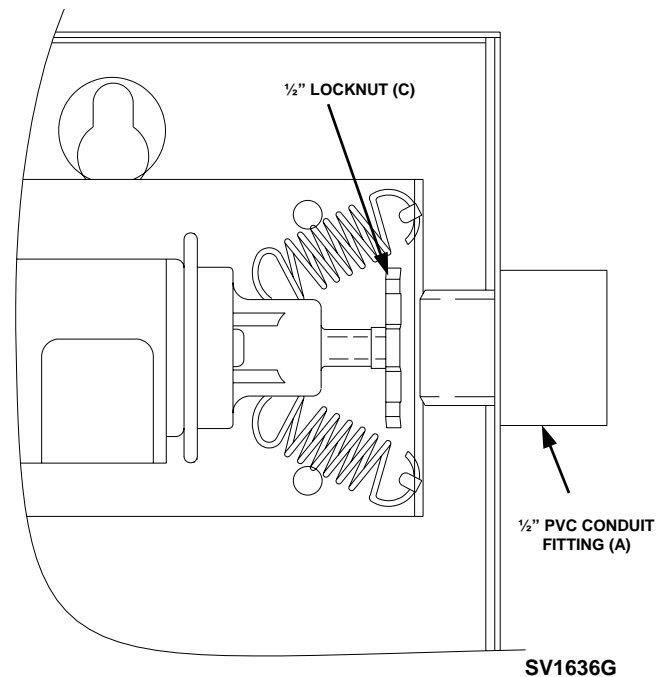
## Connection to Ice Machine

### GENERAL



### Parts Identification

### PVC CONDUIT FITTING (A) INSTALLATION



### PVC Conduit Fitting (A) Installation

1. Insert the PVC fitting (A) into the AuCS<sup>®</sup> A and tighten with the lock nut (C).

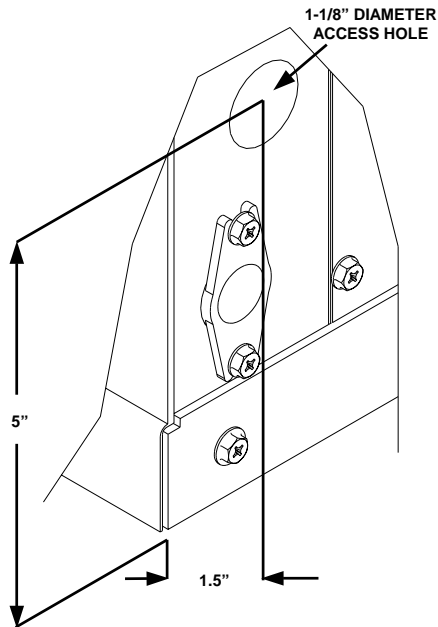
### **WARNING**

Disconnect the electric power supply to the ice machine at the electrical disconnect before proceeding.

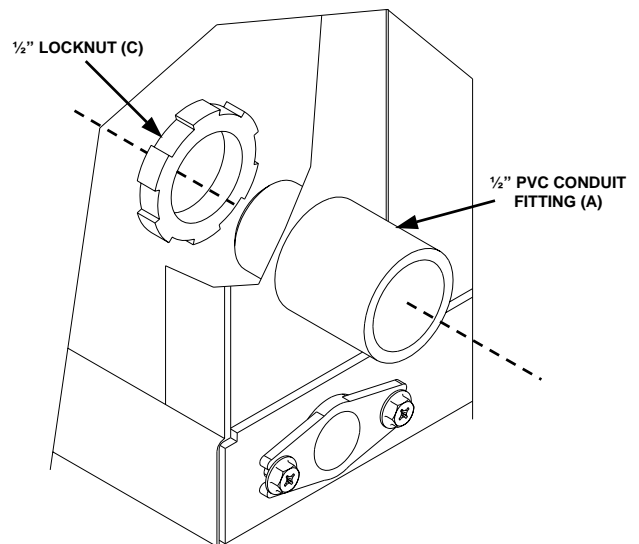
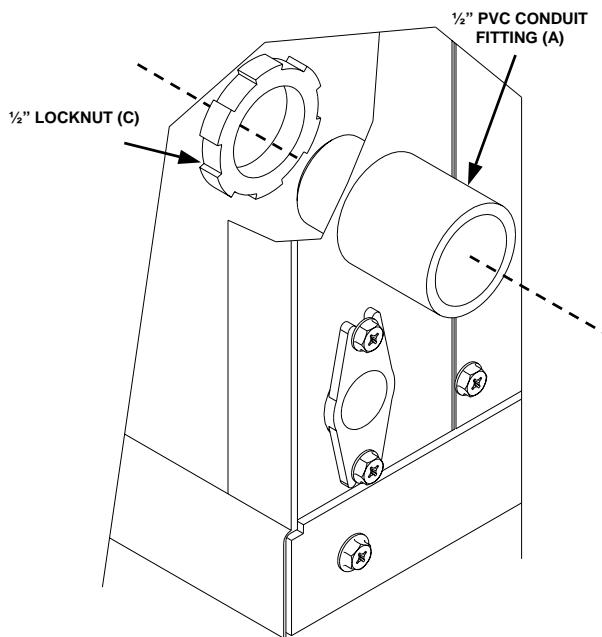
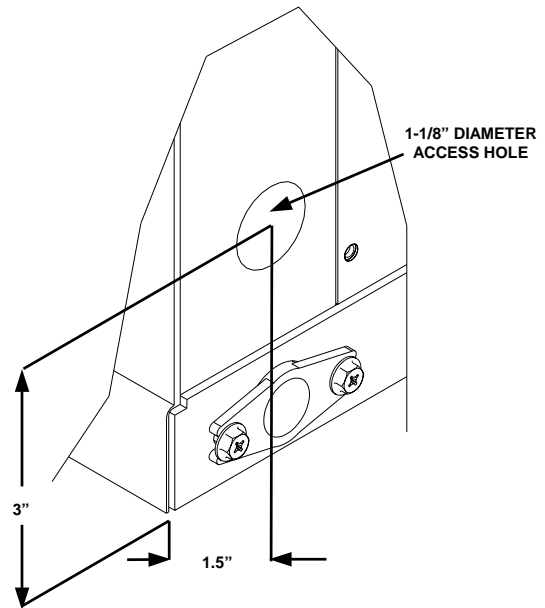
2. If required for access, remove the front, top, and right side panels from the ice machine.
3. Remove the 7/8" access hole plug located on the back of the corner post of the ice machine
4. Insert the PVC conduit fitting (Part A) and tighten with the lock nut (Part C).

## Connection to Ice Machine (cont.)

Q320 Q370 Q420  
Q600C Q800C Q1000C



Q200 Q280 Q450  
Q600 Q800 Q1000  
Q1300 Q1600 Q1800

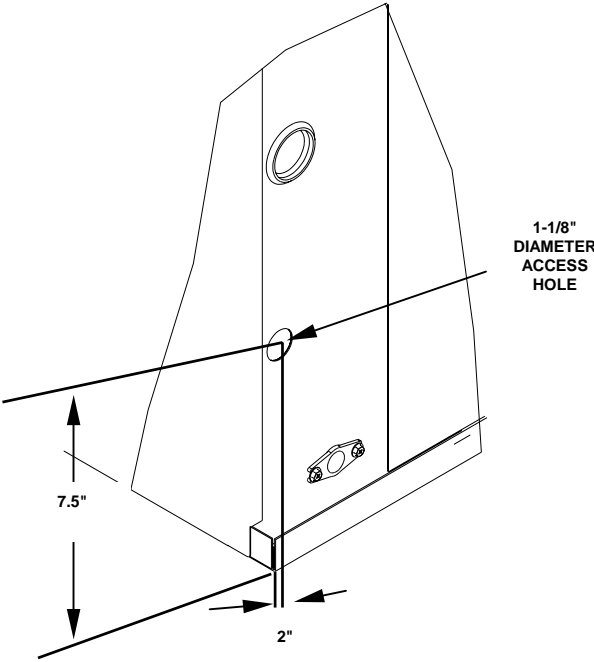
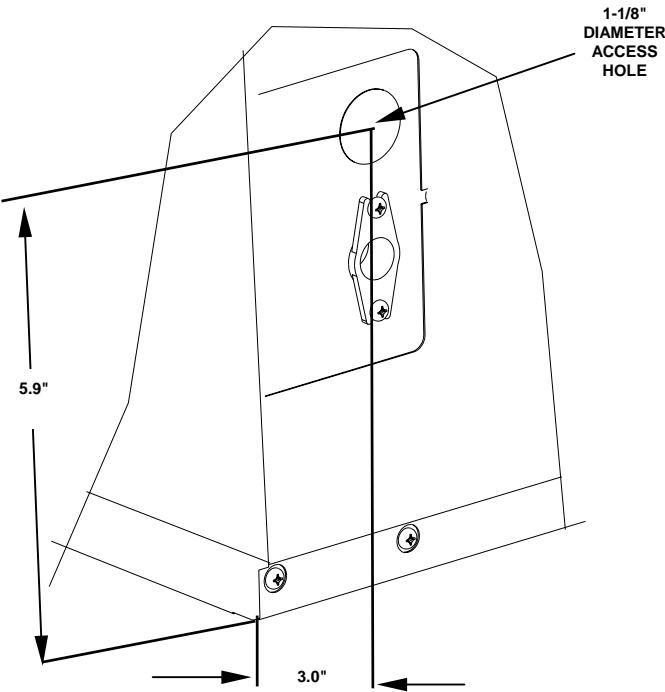


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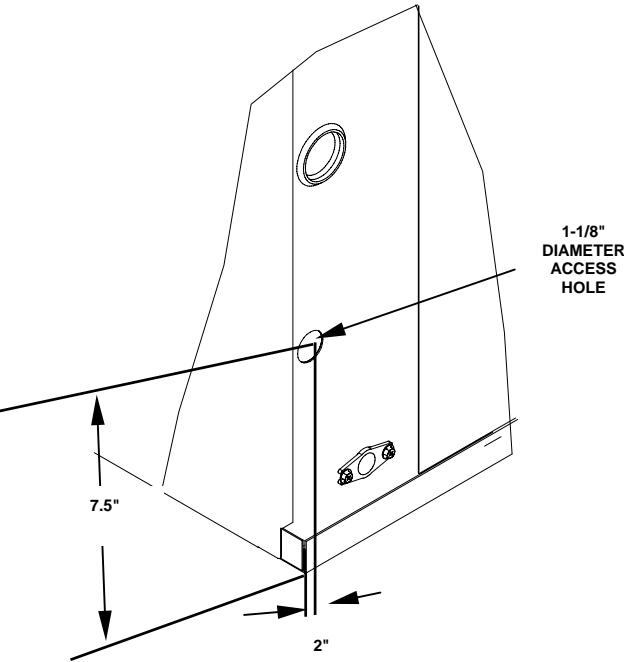
## PVC Conduit Fitting (A) Installation

IB600C IB800C IB1000C

Q1400C



QDUAL



### Connection to Ice Machine (cont.)

#### PVC CONDUIT CONNECTION (NOT SUPPLIED)

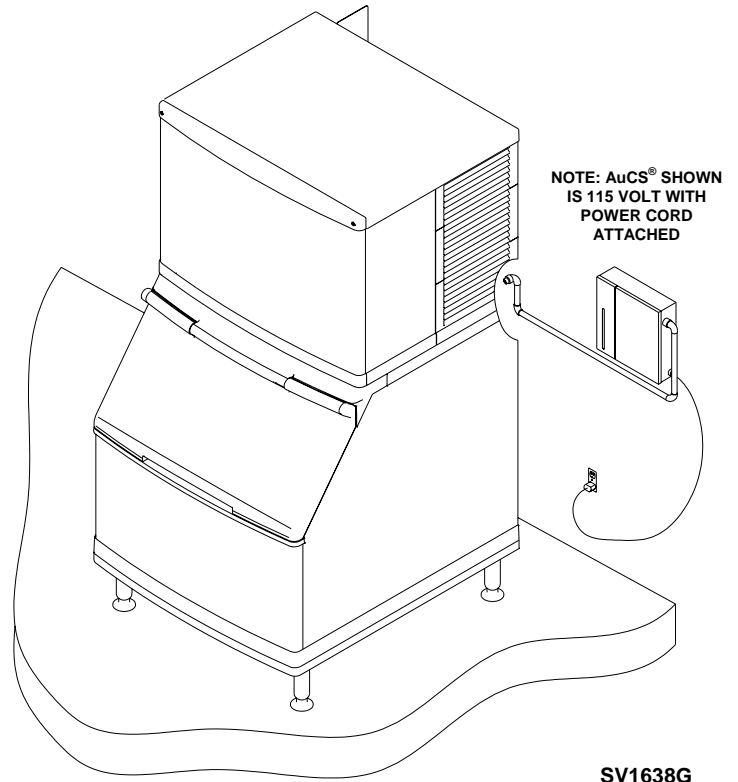
Connect the 1/2" PVC conduit from the AuCS® A to the ice machine.



#### CAUTION

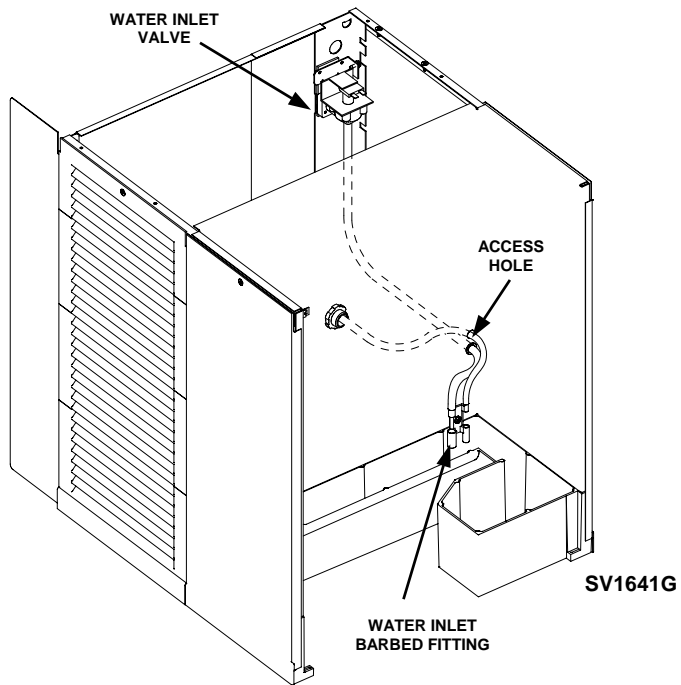
Install 1/2" conduit to protect the tubing and modular wire from damage or access.

NOTE: A pulling elbow is recommended for easier routing of the vinyl tubing and modular wire.

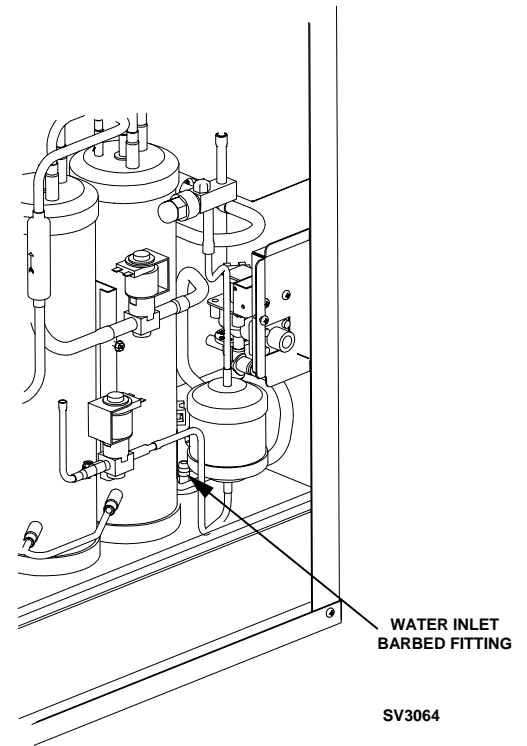


**Typical PVC Conduit Installation**

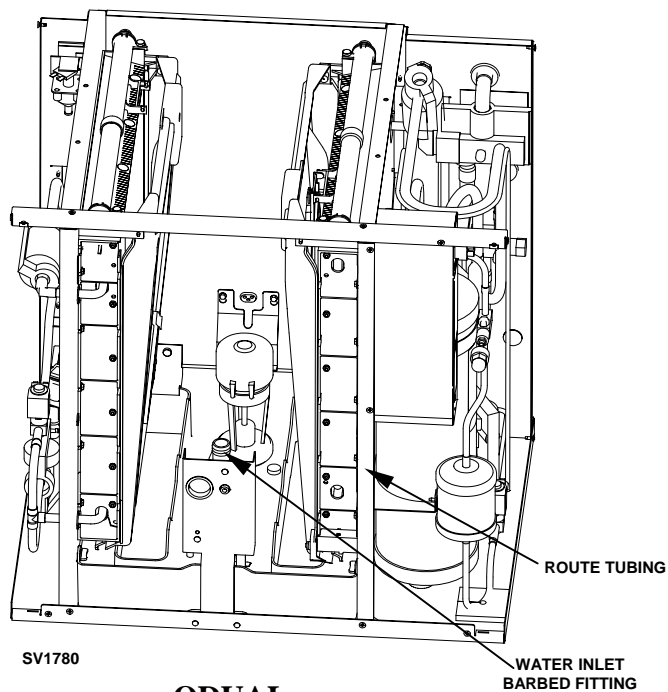
## Connection to Ice Machine (cont.)



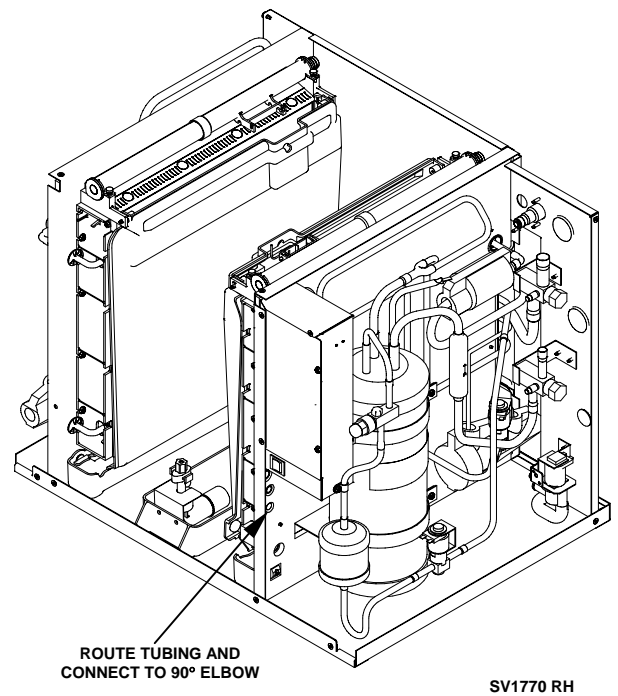
**Vinyl Tubing Installation**  
(Typical 22" Ice Machine Shown)



**IB600C IB800C IB1000C**



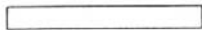
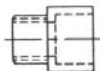
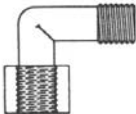

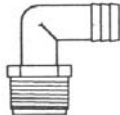


**QDUAL**



**Q1400C**



## Q1400C ONLY

- A.  1/4" DIA x 4" LG VINYL TUBING
- B.  1/2" PVC CONDUIT FITTING (QTY 2)
- C.  90° THREADED ELBOW
- D.  1/4" FERRULE NUT
- E.  90° BARBED ELBOW
- F.  3/8" HOSE CLAMP (QTY 2)
- G.  1/2" LOCKNUT (QTY 2)

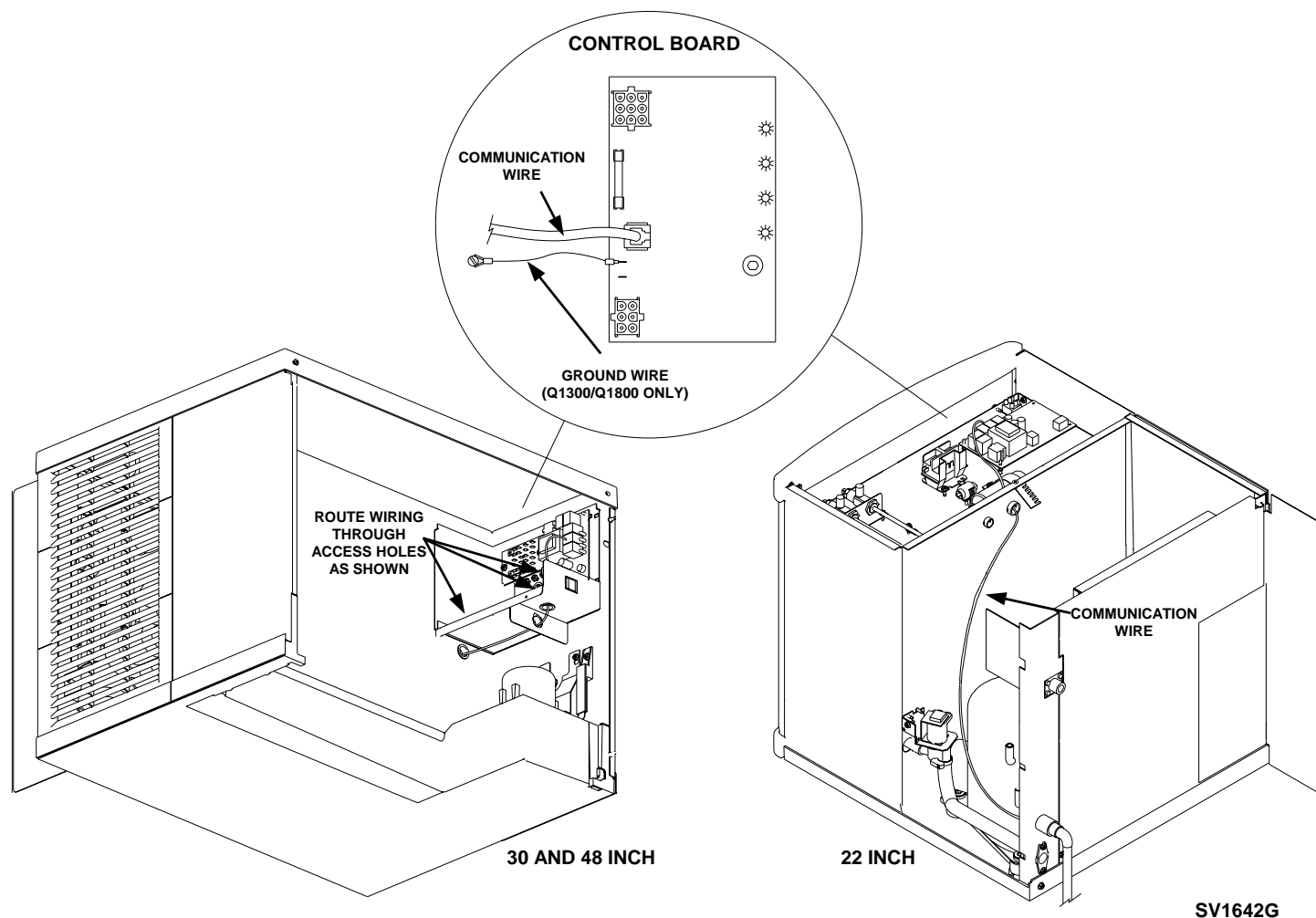
- A. Slide the 1/4" ferrule nut (part D) onto the 1/4" tubing (part A)
- B. Connect the 1/4" ferrule nut (with 1/4" tubing) to the 90° threaded elbow (part C) and hand tighten.
- C. Locate the 7/16" diameter hole in the bulkhead of the ice machine. (See illustration).
- D. Remove the plastic plug from the hole.
- E. Insert the threaded end of the barbed elbow (part E) into the hole. Screw the 90° threaded elbow (part C) to the barbed elbow (part E). Hand tighten. Be sure the threaded elbow (part C) outlet tube points downward, toward the water trough.

## Connection to Ice Machine (cont.)

### COMMUNICATION WIRE CONNECTION

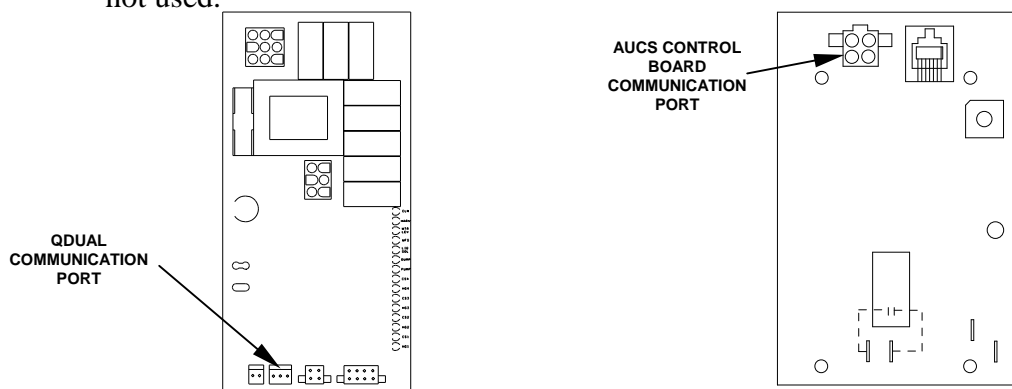
Insert the low voltage communication wire through the ½" conduit connecting the AuCS® A to the ice machine.

Plug into the jacks on the ice machine control board and the AuCS® A control board. (Refer to drawing for routing communication wire in ice machine.)



### Low Voltage Communication Wire Connection

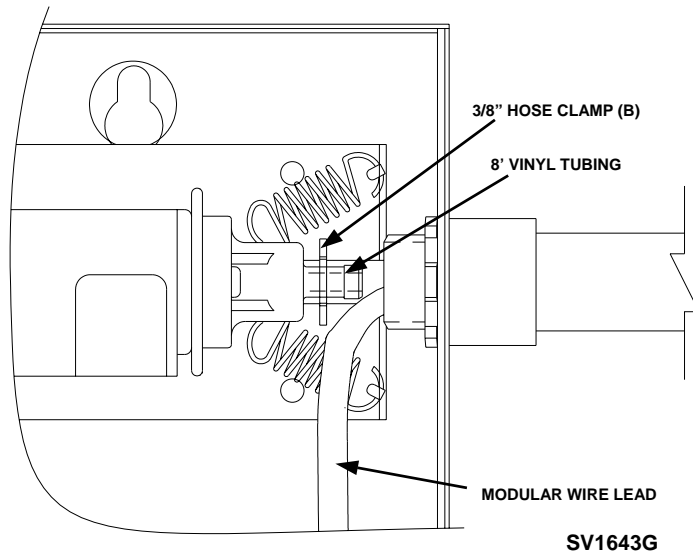
QDUAL ONLY: The communication wire is attached to the rear of the ice machine control box. The communication wire included with the AuCS® A is not used.



### Connection to Ice Machine (cont.)

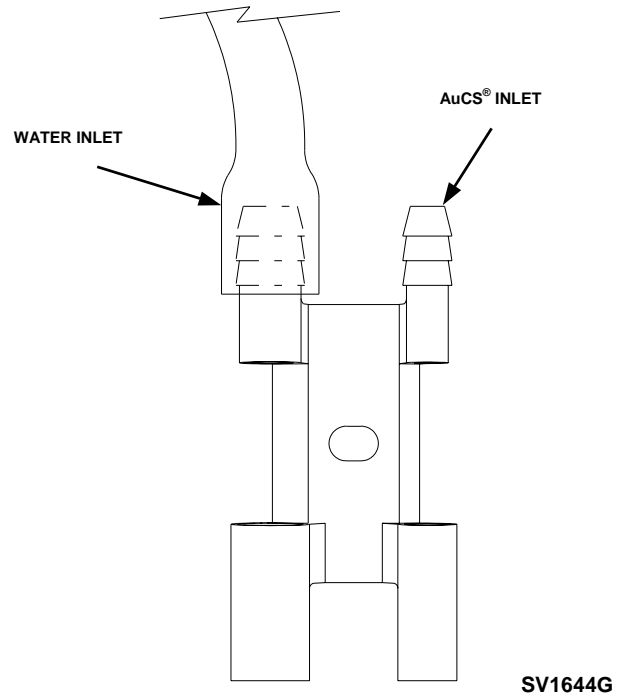
#### VINYL TUBING CONNECTION

1. Insert the tubing into the ½" conduit from the AuCS® to the ice machine.
2. Slide the 3/8" hose clamp (B) onto the tubing and connect it to the barbed fitting on the AuCS® dispenser pump.



#### Connecting Vinyl Tubing to Dispenser Pump Using 3/8" Hose Clamp (B)

3. Route the tubing through the bulkhead heyco fitting and into the water compartment.
4. Determine the amount of tubing required and cut off the excess.
5. Slide the 3/8" hose clamp (Part B) onto the tubing and connect it to the water inlet barbed fitting.



#### Connecting Vinyl Tubing to Water Inlet Barbed Fitting

#### AFTER INSTALLATION

##### **WARNING**

Read and understand this entire manual prior to operation of the AuCS®A accessory. You must understand all warning and caution statements and follow all safety precautions to assure proper operation of the AuCS®A accessory.

## Determine Type Of Solution Needed

### ⚠ CAUTION

Use only Manitowoc-approved Ice Machine Cleaner (part number 94-0546-3) or Sanitizer (part 94-0565-3) in the AuCS® A. It is a violation of Federal law to use these solutions in a manner inconsistent with their labeling. Read and understand all labels on the bottles before use.

The AuCS® A accessory will dispense Cleaner OR Sanitizer. It cannot dispense both at the same time.

### ⚠ CAUTION

Do not mix Cleaner and Sanitizer solutions together. It is a violation of Federal law to use these products in a manner inconsistent with their labeling.

## MANITOWOC ICE MACHINE CLEANER

### Part Number 94-0546-3

Ice Machine Cleaner is used to control build-up and to remove lime scale or other mineral deposits. It will not “sanitize” the ice machine.

It is recommended for use in places that have lime scale or other mineral deposits built up, but no problems with slime.

## MANITOWOC ICE MACHINE SANITIZER

### Part Number 94-0565-3

Ice Machine Sanitizer is used for sanitizing and controlling algae build-up (slime) and other bacterial growth. The ice machine should be sanitized on a regular schedule, following Manitowoc recommendations and local regulations.

It is recommended for use in places such as pizzerias, bars, bakeries, etc., that have airborne bacteria (yeast). Sanitizing is also recommended in places that do not have lime scale (or other mineral deposit problems).

| Model   | Amount of Cleaner or Sanitizer Dispensed |
|---|--|
| Q200 Q280 Q320 Q370 Q420<br>Q450 Q600 Q600C IB600C<br>Q800 Q800C IB800C Q1000<br>Q1000C IB1000C SU1000C<br>Q1400C | *2.4 ounces (70 ml)                      |
| Q1300 Q1600 Q1800 QDUAL   | *4.8 ounces (140 ml)                     |
| *The dispense rate is automatically controlled  |  |

## Installing Bottle Of Solution

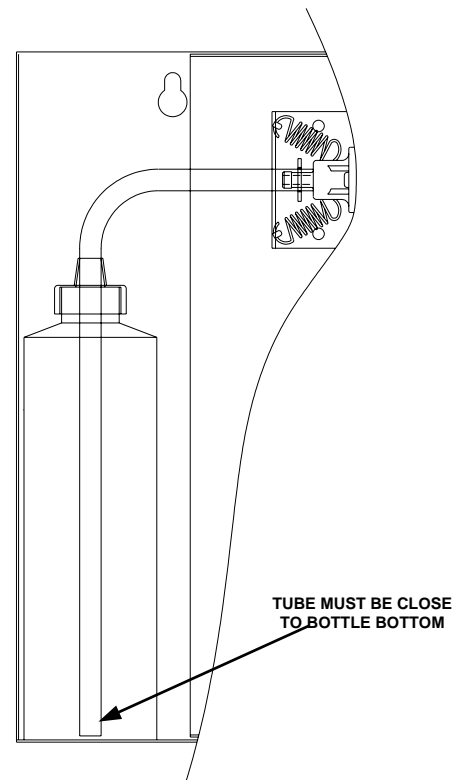
### ⚠ WARNING

Wear rubber gloves and safety goggles (and/or face shield) when handling Cleaner or Sanitizer.

### ⚠ CAUTION

Follow instructions listed under “Changing Solution Type” on the next page when changing from Cleaner to Sanitizer or from Sanitizer to Cleaner.

1. Place the bottle into the AuCS® A accessory.
2. Slide the tube to the bottom of the bottle and hand-tighten the cap.



SV1645

## Bottle Installation

### ⚠ WARNING

Do not use 1 gallon bottles of Cleaner or Sanitizer on the AuCS® A

## Changing Solution Type



### CAUTION

Do not mix Cleaner and Sanitizer solutions together. It is a violation of Federal law to use these products in a manner inconsistent with their labeling.

Use the following procedure to flush the system prior to changing from Cleaner to Sanitizer or from Sanitizer to Cleaner.

1. Remove the bottle of Cleaner or Sanitizer from the AuCS® A. Insert a 16 oz. bottle of water.
2. Repeat the following until the water bottle is empty (approximately 8 times):
  - A. Move the ice machine toggle switch to CLEAN.
  - B. The water pump and dump valve will turn on. The dump valve will shut off after approximately 45 seconds.
  - C. The pump will run for 60 seconds and then dispense for 10 seconds. (The Q1300, Q1600, Q1800 and QDUAL will dispense for 20 seconds).
  - D. Move the switch to OFF after step C is completed.
3. Install a new bottle of either Cleaner or Sanitizer solution. Refer to “Installing Bottle of Solution” on previous page.

## Hose Priming

The dispenser pump requires priming only upon initial installation, or if the hose between the AuCS® A and the ice machine has been pumped dry.



### WARNING

Do not blow into or suck on the hose in an attempt to prime it.



### CAUTION

Do not prime the hose until installation is complete.

Repeat the following procedure three times:

1. Move the ice machine toggle switch to CLEAN.
2. The water pump and dump valve will turn on. The dump valve will shut off after approximately 45 seconds.
3. The control waits until the water pump runs for 60 seconds, then energizes the AuCS® A pump for 10 seconds. (The Q1300, Q1600, Q1800, and QDUAL will energize for 20 seconds).
4. Allow the ice machine to complete the cleaning or sanitizing cycle.  
Refer to Manual Start Operation for details.

### Important

The priming procedure starts the automatic cleaning mode. Upon moving the ice machine toggle switch to ICE, the ice machine will run through 6 rinse cycles before making ice.

## Setting Frequency Of Cleanings

The AuCS® A is factory-set to clean (or sanitize) the ice machine approximately once every two weeks. For less frequent cleaning, set the selector switch as indicated below. (Refer to “Component Location and Identification” for selector switch location.)

| Switch Position | Time Between Cleanings                 |
|-----------------|--|
| 0               | No cleaning (OFF)                      |
| 1               | Approximately 2 weeks (1120 harvests)  |
| 2               | Approximately 4 weeks (2240 harvests)  |
| 3               | Approximately 12 weeks (6720 harvests) |

NOTE: Switch positions 4-9 are inoperative. Do not use them.

### Important

Using the AuCS® A accessory is supplemental to regular cleaning and sanitizing (per Manitowoc recommendations and local regulations).

## Removal From Service/Winterization

### CAUTION

Leaving solutions in the AuCS® A in freezing temperatures may result in severe damage to the dispensing pump. A failure of this nature is not covered by the warranty.

If the AuCS® A is to be removed from service for extended periods, or if it is to be exposed to ambient temperatures of 32°F (0°C) or below, follow this procedure:

1. Remove the Cleaning or Sanitizing solution bottle.
2. Follow the instructions under “Hose Priming” to pump all of the solution out of the dispensing pump and line.

## Section 3

### Ice Machine Operation

#### Automatic Operation

The following occurs when the toggle switch is in the ICE position:

- The ice machine control board counts the number of ice harvest cycles.
- The AuCS<sup>®</sup>A accessory interrupts the ice making mode and starts the cleaning (or sanitizing) mode when the harvest count equals the “Frequency of Cleaning” setting of the AuCS<sup>®</sup>A
- When the automatic cleaning (or sanitizing) cycle is complete (approximately 25 minutes, QDUAL 40 minutes), ice making resumes automatically, and the “Harvest Count” is reset to zero.

#### Important

Opening the curtain switch will interrupt the cleaning (or sanitizing) sequence. The sequence will resume from the point of interruption when the curtain re-closes.

NOTE: The harvest count is reset after the AuCS<sup>®</sup>A cycle is completed. It cannot be reset by unplugging the modular wire, changing the switch position, power loss, etc.

#### Manual Start Operation

(QDUAL SEE PAGE 3-3)

**Step 1** Set the toggle switch to the OFF position after ice falls from the evaporator at the end of a Harvest cycle. Or, set the switch to the OFF position and allow the ice to melt off the evaporator.

#### CAUTION

Never use anything to force ice from the evaporator. Damage may result.

**Step 2** To start the automatic cleaning system, move the toggle switch to the CLEAN position. The water will flow through the water dump valve and down the drain. The Clean light will turn on to indicate the ice machine is in Clean Mode.

The AuCS<sup>®</sup>A pump energizes automatically to add cleaner or sanitizer to the ice machine.

**Step 3** The ice machine will automatically time out a ten minute cleaning or sanitizing cycle, followed by six rinse cycles, de-energize the Clean light and stop. This entire cycle lasts approximately 25 minutes.

**Step 4** After the cleaning or sanitizing cycle stops, move the toggle switch to the ICE position.

**Step 5** The ice machine may be set to start and finish a cleaning (or sanitizing) cycle, then automatically start ice making again.

You must wait about one minute into the cleaning cycle (until water starts to flow over the evaporator), then move the toggle switch from CLEAN to ICE position.

When the cleaning (or sanitizing) cycle is completed, an ice making sequence will start automatically.

#### Important

The Q1400C ice machine can not perform step 5. The toggle switch position must be changed from CLEAN to ICE after the AuCS<sup>®</sup>A cycle has been completed.

## Changing Switch Position During Automatic Operation

**Q MODELS/IB MODELS/SU1000C**

If the toggle switch is moved to OFF prior to the pump dispensing (less than 45 seconds into the cycle) then switched to:

|              |   |
|--------------|---|
| <b>ICE</b>   | A normal ice-making mode begins.  |
| <b>CLEAN</b> | A manual clean cycle begins.<br>(See "Manual Start Operation," page 3-1.) |

If the toggle switch is moved to OFF after the pump dispenses (more than 45 seconds into the cycle, but before rinse cycles begin) then switched to:

|              |  |
|--------------|--|
| <b>ICE</b>   | The "clean" portion of the cycle begins.<br>After completion of the 10-minute "Clean" and 6 rinse cycles, the counter resets and a normal ice-making mode begins.  |
| <b>CLEAN</b> | A manual clean cycle begins.<br>(See "Manual Start Operation," page 3-1.)<br>After completion of the 10-minute "Clean" and 6 rinse cycles, the counter resets and the ice machine awaits a change in the toggle switch position. |

If the toggle switch is moved to OFF after the 6 rinse cycles have begun and then switched from off to:

|              |  |
|--------------|--|
| <b>ICE</b>   | The rinse portion of the cycle restarts and continues.<br>After completion of the 6 additional rinse cycles, the counter resets and a normal ice-making mode begins.   |
| <b>CLEAN</b> | A manual clean cycle begins.<br>(See "Manual Start Operation".)<br>After completion of the 10-minute "Clean" and 6 rinse cycles, the counter resets and the ice machine awaits a change in the toggle switch position. |

**Q1400C**

If the toggle switch is moved to OFF prior to the pump dispensing (less than 45 seconds into the cycle) then switched to:

|              |   |
|--------------|---|
| <b>ICE</b>   | A normal ice-making mode begins.  |
| <b>CLEAN</b> | A manual clean cycle begins.<br>(See "Manual Start Operation," page 3-1.) |

If the toggle switch is moved to OFF after the pump dispenses (more than 45 seconds into the cycle, but before rinse cycles begin) then switched to:

|              |   |
|--------------|---|
| <b>ICE</b>   | The ice machine runs 6 rinse cycles, resets the counter and starts a normal ice-making mode.  |
| <b>CLEAN</b> | A manual clean cycle begins.<br>(See "Manual Start Operation")<br>After completion of the 10-minute "Clean" and 6 rinse cycles, the counter resets and the ice machine awaits a change in the toggle switch position. |

If the toggle switch is moved to OFF after the 6 rinse cycles have begun and then switched from off to:

|              |  |
|--------------|--|
| <b>ICE</b>   | The ice machine runs 6 rinse cycles, resets the counter and starts a normal ice-making mode.   |
| <b>CLEAN</b> | A manual clean cycle begins.<br>(See "Manual Start Operation".)<br>After completion of the 10-minute "Clean" and 6 rinse cycles, the counter resets and the ice machine awaits a change in the toggle switch position. |

**Important**

After solution is dispensed (cleaner or sanitizer), the Q1400C ice machine must run 6 rinse cycles. Changing toggle switch position, disconnecting power, etc will not override the 6 rinse cycles. Each time the toggle switch is moved from Off to Ice (or power is interrupted), the six rinse cycles begin again.



**QDUAL ONLY****Manual Start Operation**

**Step 1** Set the toggle switch to the OFF position after ice falls from the evaporator at the end of a Harvest cycle. Or, set the switch to the OFF position and allow the ice to melt off the evaporator

**CAUTION**

Never use anything to force ice from the evaporator. Damage may result.

**Step 2** To start the automatic cleaning system, move the toggle switch to the CLEAN position. The water will flow through the water dump valve and down the drain. The Clean light will energize to indicate the ice machine is in the Clean Cycle. The ice machine will purge water for two minutes. The water fill valve will energize and remain energized until water contacts the water level probe. The AuCS® A will then automatically add cleaner or sanitizer to the ice machine.

**Step 3** The ice machine will automatically time out a ten minute cleaning or sanitizing cycle, followed by six rinse cycles, de-energize the Clean light and stop. This entire cycle lasts approximately 40 minutes.

**Step 4** After the cleaning or sanitizing cycle stops, move the toggle switch to ICE position.

**Step 5** The ice machine may be set to start and finish a cleaning (or sanitizing) cycle, then automatically start ice making again.

You must wait about 2 minutes into the cleaning cycle (until water starts to flow over the evaporator), then move the toggle switch from CLEAN to ICE position.

After the fluid has been dispensed opening the curtain (bin switch) will interrupt the AuCS® A sequence. The sequence resumes when the curtain closes.

When the cleaning cycle (or sanitizing) is completed, an ice making sequence will start automatically.

**Changing Switch Position During Automatic Operation**

If the toggle switch is moved to OFF prior to the pump dispensing (less than 2 minutes into the cycle) then switched to:

|              |   |
|--------------|---|
| <b>ICE</b>   | A normal ice-making mode begins.  |
| <b>CLEAN</b> | A manual clean cycle begins.<br>(See "Manual Start Operation," page 3-1.) |

If the toggle switch is moved to OFF after the pump dispenses (more than 2 minutes into the cycle, but before rinse cycles begin) then switched to:

|              |  |
|--------------|--|
| <b>ICE</b>   | The "clean" portion of the cycle begins.<br>After completion of the 10-minute "Clean" and 6 rinse cycles, the counter resets and a normal ice-making mode begins.  |
| <b>CLEAN</b> | A manual clean cycle begins.<br>(See "Manual Start Operation," page 3-1.)<br>After completion of the 10-minute "Clean" and 6 rinse cycles, the counter resets and the ice machine awaits a change in the toggle switch position. |

If the toggle switch is moved to OFF after the 6 rinse cycles have begun and then switched from off to:

|              |   |
|--------------|---|
| <b>ICE</b>   | The rinse portion of the cycle restarts and continues.<br>After completion of the 6 additional rinse cycles, the counter resets and a normal ice-making mode begins.                |
| <b>CLEAN</b> | A manual clean cycle begins.<br>After completion of the 10-minute "Clean" and 6 rinse cycles, the counter resets and the ice machine awaits a change in the toggle switch position. |





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